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Carlisle Barracks, Pennsylvania**

**THE CHANGING MILITARY EQUATION  
IN CENTRAL EUROPE**

by

**R. C. Rainville**

**5 April 1978**

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## FOREWORD

This memorandum considers a growing imperative for NATO: the identification of opportunities and measures to restore the effectiveness of its security against coercion. The author asserts that the growing Warsaw Pact strength threatens the flexibility and freedom with which the western alliance can pursue national and collective interests throughout the world. He views NATO as having long operated on margin, balancing the threat posed by the Pact not with equivalent or comparable force but with credible evidence of readiness and willingness to cope at levels of its own choosing. He concludes that growing Pact capabilities in the Central Region put that evidence in question.

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This memorandum was prepared as a contribution to the field of national security research and study. As such, it does not reflect the official view of the College, the Department of the Army, or the Department of Defense.



ROBERT G. YERKS  
Major General, USA  
Commandant

## **BIOGRAPHICAL SKETCH OF THE AUTHOR**

**COLONEL R.C. RAINVILLE** joined the Strategic Studies Institute in 1976 after duty as Assistant Deputy Chief of Staff, Operations, US Army Europe. Prior assignments were as Alternate Army Planner for the Deputy Chief of Staff for Operations and Plans, Department of the Army, and Executive to the Chief of Staff, US Army. He earned a bachelor's degree in physics from Tufts University and is a graduate of the National War College.

## **THE CHANGING MILITARY EQUATION IN CENTRAL EUROPE**

*Detente, without defense, is delusion*

The current Administration assumed responsibility for the security policy of the United States at a time of increasing uncertainty as to the significance and portent of the changing military balance in central Europe. "Detente" had been restored to respectable utility in the vocabulary of interalliance discourse, even while experiencing some buffeting in application. Peripatetic diplomatic activity has signaled continuing US support for European friends, Japan and Korea, and interest in the resolution of flash point tensions in the Mediterranean basin, Middle East, Africa and our own hemisphere. Challenges to the viability of our primary security commitment, the NATO alliance, long in building, but recognized in recent years more in the concerns of the Congress than by the actions of the executive branch, have received fresh attention during the initial ventures of the Administration into the field of alliance diplomacy.

US national security policy is based, at bedrock, on the security of the Atlantic Community. As the practice of policy has evolved, this community of interest has come to embrace Japan, but its focus remains the states which constitute the NATO alliance. Challenges to



the security of NATO are threats which imperil the overriding US national interest—the safety of our people and the inviolability of our national territory. In its commitment to this alliance the United States has subscribed to the premise “An armed attack against one . . . in Europe or North America shall be considered an attack against them all. . . .” But, a precondition of any national interest or associated policy is the maintenance of strength sufficient to balance that interest. Alliance interests must stand a similar test.

The confrontation in Europe is between respective blocs, but only the superpower members, the United States and the Soviet Union, have the political leverage to alter significantly the form and substance of this confrontation. As these two powers have pursued the policies and practices of ostensible detente, significant uncertainties have developed in the credibility and resolve of their alliances. The pursuit of detente has tended to reverse the traditional uncertainty equation—we have become more predictable to our adversaries and unpredictable to our allies. But it is a truism that, whenever the search for peace seeks only to avert war, the international community is at the mercy of the most ruthless. For NATO there is a growing core imperative, the identification of opportunities for and measures necessary to restore and enhance the effectiveness of its security against coercion. In concert, and as separate states, the alliance members must assess the affirmative options available to them.

It is in the character of the United States to be impatient to complete tasks which it sets for itself. Failing this, it tends to lose interest. But many NATO security improvements, some now underway, others merely prospects with high potential, will not lend themselves to rapid resolution. Strategic concepts, long ingrained, give way to new strategies only with the growth of conviction that the new affords a quantum improvement over the established. Force structure, once in being, resists conversion in form and composition, constrained by problems of manpower and materiel. Technological opportunity converts slowly into military advantage at a pace dictated by willingness or ability to dedicate expensive resources to that objective. Readiness, once neglected, can be restored only at high costs in resources and effort. The monetary impact of options which favor NATO are high at a time when the economic posture of many alliance members has reached new lows. But, in the interest of the mutual defense, the United States must provide the lead and the example, persuading its allies of the strategic opportunities open to NATO through continuing



commitment. The time is right for a general alliance review of the trends in the situational environment of its security, the strategic implications of shifts in the military balance, and the courses open to it to enhance its readiness for the 1980's.

This survey addresses these considerations as they apply in the Central Region, toward which the preponderance of US strategic commitments to NATO are directed.

### THE SITUATION AND TRENDS IN THE CENTRAL REGION

A singularly significant convergence of trends characterizes the situation and impels the evolution of the environment in the Central Region. This section addresses these trends and this evolution, considering political and economic factors, but emphasizing those elements of change which impact most directly on the effectiveness of alliance security.

At a time when soaring costs and forecasts of ever more limited resources dictate that NATO seek a more disciplined husbanding of its military assets, there is an increasing acceptance of the reality of a growing Warsaw Pact threat. The transitory euphoria recently induced by the rhetoric and prospects of detente has been replaced by the harsher realization that, while war remains only a remote prospect, Warsaw Pact strength threatens the flexibility and freedom with which the members of the western alliance can pursue their individual national and collective interests throughout the world.

Vulnerabilities in the Central Region derive from long-standing deficiencies in subscription of commitments by NATO member states. Threat appreciation has to some degree raised the resolve with which the several states approach their tasks, but realities of their economic situation compel of some an increasing curtailment of commitment. At the same time the United States seeks to spread the burden more equitably and to rationalize the assignment of military functions. But in this effort the United States faces a potential credibility problem, external to the narrow parameters of direct NATO/Warsaw Pact confrontation, but relating to the changing strategic context in which NATO objectives must obtain. As it pursues detente and negotiates, primarily in SALT and MBFR, positions of lessening relative security advantage, it must concurrently sustain a rational view of the threat, one of which our allies can be readily convinced or persuaded.

*The Threat.* Highly evident Warsaw Pact military force improvements, not merely changes in perception, have stimulated universal recognition of a growing threat, reflected in the capability and survivability of Soviet strategic systems, in the qualitative and quantitative upgrading of Soviet general purpose forces, particularly the ground and tactical air forces opposite the Central Region, and in increased Soviet emphasis on civil defense preparedness.

The Pact is now considered capable of initiating a no-notice or short warning time attack against the Central Region, based only on covert preattack preparations and without preattack mobilization. This attack could involve about 50-60 ground divisions under optimum circumstances, heavy in tanks and artillery, with a well-established offensive and defensive chemical warfare capacity and an upgraded capability to conduct tactical nuclear warfare. Attack could probably be accompanied by a rapid buildup to near 90 divisions as mobilization filled out the available category II and III divisions. Logistic and sustaining requirements for this force, previously considered by Western analysts as a limiting factor, are now considered adequate to sustain the momentum of attack. Pact strategy may now be based on this ability to launch a no-warning attack.

Pact air and counter-air capabilities now threaten the assumed umbrella of superiority under which force deployments, logistic sustainment, and reinforcement reception and build-up by NATO defenders have heretofore been planned with some confidence.

Soviet naval forces, while far short of NATO and particularly US Navy power projection capacities, now present a significant threat to the security of sea lines of communication on which deployment, force buildup, resupply, and the natural resource sustainment of the Central Region would depend in wartime. NATO naval forces are only marginally adequate to offset this threat.

The deterrent value of US strategic nuclear systems is losing its effect as Soviet technological improvements in targeting effect, coupled with existing throw weight advantages, have provided the Soviets higher orders of confidence that they can survive a US strike with adequate residual counterforce capability.

*The Economic Context of Military Posture.* In the complex calculus of theater military capabilities, the imbalance in central Europe cannot be attributed to aggressive Warsaw Pact force improvements alone. In fact, some argue that recent Pact efforts reflect a desire to redress a preexisting disadvantage. But imbalance is rooted, too, in long-term



neglect of needed improvements in concept and substance by the NATO nations with commitments in the region; neglect with origins in apathy, magnified by economic realities and internal political pressures not readily willed away. Budgetary constraints affect these security commitments, because of the escalating costs of personnel, services and the procurement of materiel; conditions common to all members in the Central Region. They have particular impact in several areas, in all of which significant deficiencies exist, and which assume critical significance with the assumption of short warning or no-notice Pact attack criteria.

The ability to maintain forward deployed stationing of forces is degraded, because of costs associated with family support, community activities and so-called "quality-of-life" programs essential for troop morale and efficiency. These costs affect the forces of the United States, United Kingdom, Belgium and the Netherlands.

Maintenance of active forces at full manning levels, rather than at depressed or cadre manning, and acceptable deployability postures has become increasingly difficult, as has the concomitant maintenance of reserve forces at readiness levels commensurate with rapid mobilization and deployment requirements, and the preservation in reserve force structure of units necessary to meet the specified needs of the deployed force. Similarly, sea and air strategic mobility capacities commensurate with force deployment requirements of the strategy have not been attained.

Stockage of replacement equipment items and consumables at realistic replenishment levels has not been reached. Within the alliance there are inconsistent stockage levels, varying by nation and by commodity, through varying interpretations of NATO criteria. This problem is now compounded by reassessment of warning-time and war-duration parameters which bear on the intensity of combat during early stages and indicate much higher rates of consumption. Ammunition supply levels, and the distribution of ammunition, are not now adequate to the requirements of the forces in the Central Region. Included considerations are the maintenance and positioning of prepositioned unit equipment sets (POMCUS) required by some US deploying forces, now inadequate to satisfy early deployment criteria, and the development of reception and in-theater lines of communication compatible with concepts for the more flexible employment of reinforcing units.

Equipment modernization and upgrading have been retarded. For US forces there has been delayed receipt of some new systems because

of inadequate supporting personnel training and repair parts programs. Stated US force needs for higher densities of tube artillery, for improved tactical nuclear artillery rounds, and for a modern aviation force structure have not been fully satisfied. There are parallels in other alliance forces, although the Federal Republic of Germany has made impressive progress in providing armor, antiarmor, and tactical air defense equipment of exceptional quality for its forces.

Development and introduction of new weapons systems, always subject to program slippage, have more recently been tied to additive, political constraints relating to systems standardization within the alliance. To the degree that standardization objectives enhance tactical and logistic interoperability, associated delays may be worthwhile, but many are driven by advocacy considerations of economic and budgetary advantage employed to justify (or to challenge) standardization. Domestically driven pressures to equalize the NATO burden, however appropriate, must recognize that willingness alone is not enough. Our allies, again with the notable exception of the Federal Republic of Germany, face real challenges to their ability to transfer or divert resources to defense programs.

The Federal Republic of Germany remains the strongest anchor of the alliance, relatively secure in the economic underpinning of her force commitments. Force reorganizations recently undertaken have been designed to improve operational capabilities, mobilization effectiveness, and the integration of substantial territorial force capabilities into the efforts of the regular armed forces. But to preserve economic reserves the Federal Republic has become increasingly reluctant to assume obligations by default, rejecting the need to continue "offset" support of US forces, and displaying a high degree of resistance to assuming costs associated with greater burdensharing, such as the restationing of forward based US units in more tactically logical sectors. In a political context, the Federal Republic adheres to a policy of consistent reluctance to overtly assume the mantle of dominant European partner, seeking instead, perhaps for reasons related to recent history, to arrange a balance of influence among the European allies, and a certain deference to the position of the United Kingdom in alliance councils and commands.

The United Kingdom, under pressure of the declining value of the pound, has curtailed her overall defense effort while trying to maintain her presence in Germany, in part by reorganization of tactical forces to configurations of uncertain wartime effectiveness. Primary reliance is



on forces to be deployed from the United Kingdom at imminence of hostilities. There is little prospect of improvement in her reinforcement capabilities or the adequacy of logistic stockage levels. Similar resource and economic conditions, as well as differing attitudes toward increased alliance commitments, indicate little prospect that Belgium, or the Netherlands can or will improve their force posture, or position forces more readily proximate to potential wartime battle positions. In consequence, in the context of a short warning time Pact attack potential, any increases in the initial defense of the critical North German Plain approaches will depend on the force of other members, primarily the FRG and the United States.

Canada remains relatively stable economically but increasingly independent politically, while retaining "proper" alliance relationships.

Within the US domestic environment, political pressures, involving both the executive and legislative branches, have modulated the scope of US military involvement. Tendencies toward curtailments of our peacetime force commitments, best exemplified by the Mansfield amendments of the early 1970's, have been replaced by pressures for a more disciplined approach to roles for US forces. The so-called "Nunn Amendment" to the FY 1976 Defense Appropriations Act forced a more rigorous review of the efficiency with which personnel resources were applied, and had a salutary impact on the structure of US forces in the Central Region. These limited steps have triggered a more extensive consideration of the total strategic concept upon which defense of the region is based. The consequence of these reappraisals should stimulate more professionally rationalized priorities and levels of resource application needed to satisfy security objectives.

*The Erosion of NATO Defense.* It is speculative to postulate that the foregoing and other resource constraints gave rise to the inertia which characterized NATO defense efforts in the region during the 60's and early 70's, but it is apparent that these were coincident phenomena. The period was not distinguished by imaginative or innovative conceptual or doctrinal initiatives to apply the resources which political authorities were willing to provide.

The agreed strategy for the Central Region provides for direct defense, prevention of penetration, and ejection of penetrating forces. Interpretively, defense success has been predicated on the ability to hold penetrations, employing alternatives such as tactical nuclear weapons for destruction in line with the implication of direct defense that means appropriate to needs will be applied at all levels. While

sound in theory, this assumption has acted to inhibit the refinement of concepts and capabilities aimed at successful conventional defense. There are also distinguishable allied differences in doctrine which lead to varying applications of the agreed strategy in such matters as the relationship of the FEBA to the political boundary, the linear nature of the defense line, use of covering forces, and the density and adequacy of tactical reserves. As the result of these and other deficiencies, where allied forces share tactical boundaries, discontinuities and consequent vulnerabilities exist.

All allies, with the exception of the United Kingdom (and France if engaged in a cooperative force employment), are dependent without alternative on US tactical nuclear weapons support to undergird the conventional defense. US tactical nuclear capabilities are a symbol which reinforces the credibility of theater defense by providing an ultimate theater warfighting reliance if conventional defense alternatives fail or for retaliation. But the linkage acts as a restriction on US flexibility to structure its forces in peacetime and on nuclear employment decisions in wartime, and, increasingly, automatic linkage to lower or higher orders of force is no longer fully credible.

Employment of tactical nuclear weapons poses several continuing problems. US warhead support for allied delivery systems is costly in manpower, and uncertain in wartime when US national authorization is necessary for release. Allied consultative arrangements exist, but the degree to which allied views would constrain (or expedite) a US decision to employ remains questionable. In ground applications, predominant reliance on dual capable systems risks significant attrition of delivery means and warheads during the conventional phase of hostilities. With increased urbanization and higher population densities, collateral damage and civilian casualty potential offset improvements in damage limiting technology and will inhibit use of these weapons to a higher threshold.

Logistic support of Central Region defense is a major area of functional inadequacy. Commodity stockage levels vary in national application according to assumptions with respect to combat intensity and duration. The location of stocks in centralized depots or in forward storage varies. Commonality of logistics is far from attainment and systems for flow, replenishment, and evacuation vary by national sector. Item standardization, both of major equipment and repair parts, requires much more impetus. But lack of logistic flexibility is the most serious shortage. Support remains national depot dependent, tied to



traditional national sectors. The siting of support facilities will be a critical determinant of the ultimate responsiveness of combat forces to the demands of flexibility on the battlefield, and will depend on the allies' ability to establish multilateral distribution schemes. Meanwhile logistic flow remains transportation intensive because of the rearward location of stockage of critical combat material, particularly ammunition.

As a related matter, the United States is becoming increasingly dependent, in the revisions of its force structure and of the logistic systems which support the combat force, on so-called "host nation" capabilities for functions such as road and rail movements of materiel and resupply, bridging, maintenance and security of lines of communication, reception ports and airfields, petroleum pipelines, rear area security, and air defense of rear areas. Specific agreements to insure this support have, in limited cases such as the rail movement of ammunition stocks, been negotiated; but the majority of the assumed support remains ill-defined.

Sustainability of Central Region combatant forces involves more than logistics, however. US use of prepositioned materiel configured as unit sets (POMCUS) preserves a rapid reinforcement alternative; but the prepositioning locations influence employment availability by a factor of several days; and the draw down on POMCUS to satisfy foreign military sales commitments has affected, at least temporarily, the POMCUS advantage for the three divisions based in the United States which depend on this equipment for optimum deployment. Prepositioned war reserve stocks of major end-items for US forces have been similarly depleted by foreign military sales, however, there are US programs underway to replace POMCUS and war reserve stock shortages. The adequacy of strategic lift and resupply lift was predicated on longer term build-up based on long warning time, long war duration assumptions. The suitability and reliability of reception capabilities do not always accord with force employment alternatives and resources to service the reception function must be provided or the function rationalized to host nation. The production base in the United States (no hot base, few warm base lines for major systems or munitions) is not geared to conversion to wartime production on short warning, leading to the conclusion that any war would, under most assumptions of duration, of necessity be fought to its end with stocks on hand at the start.

Sustainability also depends on the ability of nations with force

commitments to meet scheduled deployments and compensate unpredicted demands of attrition. Over time the allies have experienced readiness degradation of both active and reserve component forces for reasons of budgetary economy. The Federal Republic of Germany is the possible exception where readiness trends, particularly of reserves, are positive. In deployable US active force units which depend on reserve component "roundout," readiness disparities with their affiliated units are the norm, and equipment standardization of major combat end-items is not complete for like units in the active and reserve structure. Mobilization capacities, particularly of US forces, are highly uncertain. Those which depend on a sustaining reserve base, both unit and individual, are imperiled by the lack of a draft to provide incentives to reserve membership; and "deep stand-by" draft and registration concepts are not compatible with short-warning time needs for mobilization. European mobilization mechanisms are generally more effective, and, in the case of the Federal Republic of Germany, practiced by calling up units and individuals for peacetime exercises.

The military geography of Western Europe and particularly of the Federal Republic of Germany is changing rapidly and markedly along the principal strategic avenues of approach into the Central Region. Urbanization, concentric to major industrial areas, with progressive interconnection of built-up areas and increasingly intricate road networks becomes progressively more dense westward from the FRG eastern border, until, in the northwest Federal Republic of Germany and BENELUX there is no urban discontinuity. A restraining feature of this increasing interconnection of developed areas is the potential for much higher levels of collateral damage and population casualties when tactical nuclear weapons are employed.

Discrete command and control communications systems tend to restrict allied force interoperability to the lowest levels. Efforts to develop alliance command and control systems have been undertaken with varying levels of success, but remain inadequate.

In some respects the strategy for the Central Region assumes French force participation, despite their formal withdrawal from NATO military command. French bilateral military cooperation with US and German forces reinforces this assumption. Thus alliance defense planning and force structure are vulnerable to the degree that they depend on the assurance of a French role.

But the common, and perhaps most significant, vulnerability of allied defense capabilities in the Central Region derives from the



dependence of strategy, force structure, mobilization, reinforcement, and logistic stockage on assumptions of a relatively long warning time prior to hostilities, assumptions now seriously in question. There is need for review of the implications of this assumption to accommodate revised perceptions of Pact capabilities for surprise attack. The necessary adjustments will impose significant resource costs to correct existing deficiencies. President Carter's defense initiatives at the London NATO Summit Meeting, elaborated by Secretary Brown at the NATO Defense Ministers Ministerial, call for a long-term defense program to adapt Alliance defense to the needs of the 1980's and for short-term measures aimed at early correction of these critical deficiencies.

### THE OPPORTUNITIES

Considered together, the growing threat and the neglected and eroded posture of NATO forces which face it in the Central Region would seem to offer uncertain prospects for the success of NATO objectives, either of deterrence or for battlefield success. In the face of skyrocketing costs, can the allies afford the insurance necessary to forestall conflagration on their own territory or the more threatening probability of an erosion of political influence in international affairs, inferiority which would find its reflection in Africa, the Middle East, South Asia or Latin America as Soviet adventures go unchallenged and unchecked because of the imbalance in Central Europe?

*The Implications for Strategy.* The answer lies less in how large a force the Pact has, than in how big a force NATO needs. It lies more in the demonstration of cohesive resolve than in quantum increases in forces in being. It lies in the qualitative character of these forces as much as in their numbers. It lies in the imaginative application of force more than in its mass. The baleful situation in which the NATO allies find themselves may become the catalyst for the opportunities through which they overcome it. There are positive signs of an emerging readiness to come to grips with the problem of providing a credible conventional capability, linked to a parallel tactical nuclear capability, but no longer dependent upon it. It is not enough to rectify the force capability shortfalls described in the preceding section—and, in fact, resource projections render many of the actions required suitable only for the long term—the philosophical foundations of the defense must be reinvigorated to stimulate confidence of success. To a great degree this

renaissance of effort is attributable to the new breed of NATO military commanders who have focused their attention on strategy and tactics, a focus which had been obscure since the late fifties, and have shaken up the established precepts for defense of the Central Region and shaken off the conceptual inertia of recent years. The innovative instincts of these military authorities have found their complement in several national political constituencies.

In this leadership context there is a growing conviction that conventional defense of the Central Region is feasible. This approach recognizes that the allies can ill-afford to trade space for time in the defensively shallow Federal Republic of Germany, but must impose maximum attrition at and beyond the FRG eastern border through massive application of conventional indirect firepower, by realizing the potential defense advantage inherent in "anti" weapons system technologies, and by exploiting barrier effects of burgeoning urbanization. It seeks to capitalize on time contingent vulnerabilities of the Pact which may make long-term sustained combat unattractive to them. To counter the assumed Pact objectives of imposition of influence by rapid seizure of critical centers and neutralization of the effectiveness of NATO forces rather than destruction of populations and facilities, the corresponding NATO defense objective is to convince the attacker that his ultimate success is unlikely through failure of his initial effort and before major secondary reserves can be employed. This concept which has acquired the often misunderstood slogan of "winning the first battle" does not presuppose immediate war end, but seeks a battlefield pause or prolongation of combat at lower intensity levels while concurrent political decisions as to escalation or termination are reached through some form of cross-battlefield negotiation. It depends for success in large measure, therefore, on adequate and evident sustaining and reinforcement capabilities. As a concomitant to this concept initiatives toward force flexibility, rationalization and interoperability have gained impetus, and there is a trend toward greater international interchangeability in the employment of reinforcing forces in an attempt to obviate the alarming constraints and imbalance in the conduct of conventional defense imposed by traditional national sectors. There are concurrent pressures for improvement of the ability of all forces to defend well forward, at or near the political boundary, to develop conventional reserve alternatives flexible enough to counter enemy attacks wherever they



might occur across the central front, and to exploit more fully the potential of territorial forces, particularly those of the Federal Republic of Germany, which have not heretofore weighed heavily in the capability balance. Such measures toward greater flexibility should provide a higher order of confidence to allies, and greater uncertainties to the Pact.

In the case of forward deployed forces, the limitation of basing facilities to traditional national sectors has in the past served to restrict severely the tactical application of these forces and consequently the refinement of defense concepts. Current initiatives to base a US brigade in the north and to commit deploying US forces in wartime to the critical northern sector of the Central Region represent an important step to break through this limitation. Associated considerations are the need to revise and reconfigure the logistic and command and control concepts and facilities which have also been tied inflexibly to national sectors. But the significant political accommodation which has been required among the states of the alliance to achieve even this small step is a salutary indication that the best judgments of NATO military commanders may well be matched by action at the political level. In the United States, congressional stimulus has provided a new dynamic, reflecting a unique congruence of effort best represented by the survey in 1976 of European defense concepts and US force capabilities by LTG Hollingsworth, an executive branch assessment stimulated by congressional interests in and pressures toward improving the character and content of our contribution to NATO security.

Two assumptions concerning conflict in the Central Region have provided added impetus to these efforts, one relating to warning time, the other to war duration.

Intelligence based estimates of available warning of Pact attack vary as functions of the reliability of acquisition of significant indicators and of Pact planning parameters, tempered by cautions relating to the uncertainty of Pact preattack preparation requirements. In the past the US programming assumption of a relatively long period for NATO preparation came to be a common strategic planning assumption and consequently the basis for action relating to readiness, mobilization, deployability, and the adequacy and structure of forward positioned forces. Despite its evident shortcomings in intelligence terms, the formula reinforced a tendency toward best case assumptions in solving force structure problems. Another warning assumption, on the other hand, presupposes a short period of Pact preparation, no Pact preattack

mobilization, and as little as two days of NATO warning, although up to seven days has also been suggested. These estimates are logical in view of evidence of improvements in Pact force readiness, materiel distribution, and logistic sustainability. The Pact is aware of NATO reliance on reinforcement by deploying forces, and the need for substantive in-theater force and logistic adjustments to attain an acceptable defensive posture; and can be expected to exploit the advantages which would accrue to him during this period. Longer warning time estimates are essentially best case assumptions which favor prehostility establishment of a well-developed base for force buildup, affording time for tactical units to deploy from rearward basing, logistic systems to be repositioned, stocks moved, barriers installed. Quick reaction readiness is less imperative. Concurrent Pact mobilization means that he attacks with greater availability of reserves; but, for the defender, some time is available to reposition reserves and reinforce points of likely penetration as intelligence develops. Short warning, on the other hand, favors prehostility establishment of combat firepower heavy deployed structure, and is equally valid whether the period of Pact preparation has been long or short. Force deployments must be rapidly accomplished, tactical combatants cannot rely on the build-up of a firepower base or of critical expendable stocks such as ammunition. The premium is on quick reaction readiness levels. The logistic and sustaining base may initially be less well developed, placing competitive demands on strategic mobility needed to deploy additional tactical reinforcements.

Estimates of war duration tend also to be driven by programing considerations since these set a cap on requirements, useful as a limiting constraint on funding. Short war duration estimation encourages curtailment of resources associated with long-term buildup and sustainability, but requires heavy investment in prepositioned forces and immediate, short-term consumption stocks. A long war duration imposes requirements for long-term sustainment, but the corollary assumption of lesser levels of initial intensity permits degradation of readiness of active and reserve component forces needed for later deployment. Relating war duration to assumed Pact capabilities and probabilities, a surprise attack presupposes a quick Pact victory, since there would be little value to the Pact of long-term attrition after initial failure. But ultimate Pact force levels, mobilization, and reserves are contraindicative. The Pact is also seeking to develop the potential for more protracted conventional conflict.



NATO planning considerations currently relate only to defense, not to attack into and destruction of the Pact in his territory. For NATO a first battle victory is no assurance of a negotiated end or de facto termination. The presumption that the Pact will continue their attack or escalate to tactical nuclear levels of combat cannot be discounted. Thus a phased approach to probable outcomes minimizes planning risk. This approach posits an initial, relatively brief, period of high intensity conventional combat, requiring high levels of combat maneuver and firepower units and high stockage levels of forward positioned combat consumables for a brief defense to stabilize, block and eject the attackers. Since early Pact reinforcement potential, both in numbers and time, is better than that of NATO forces in the Central Region, a probable second Pact attack would follow, either conventionally or using tactical nuclear weapons. This phase could be attenuated if nuclear weapons were not employed, placing high demands on NATO for rapid and continuing buildup of reinforcing forces and assurance of logistic sustainability. Finally, if the NATO defense succeeds, there must be preparation for a drawn out campaign, beyond 90 days, marked by relative operational inactivity, providing an uncertainty period with respect to a negotiated settlement. During this phase NATO buildup would continue to be critical to deterrence of further attack.

The aggregate potential of "anti-" systems, when related to concepts and tactics which exploit their potential to maximum effect, provides the most compelling indication of NATO's ability to conduct successful conventional defense of the Central Region. Force structure and equipment adjustments will be required to optimize application of these systems, and trade-offs must be considered to offset resource costs. But the implications of the "Yom Kippur" war are clear that in proper combination with other weaponry, precision guided munitions (PGM's) and the new generations of antiarmor and anti-air systems raise attrition potential to unprecedented levels, destroying at relatively low cost the major systems of the opponent. These weapons logically favor the defense. However, the Pact advantage against these weapons lies in timing, and in selection of specific points of attack. Consequently, for NATO their full potential lies in the degree to which such systems can be either proliferated or flexibly massed.

Precision guided munitions are a category of weapons having the potential to replace tactical nuclear weapons in specific applications where target effect is the primary reason for employment. PGM have been tested during the Vietnamese War and, fully exploited, have an

assured high kill probability with constrained collateral effects. For NATO forces in central Europe, as reductions can be made in nuclear delivery systems and warhead requirements many inhibitions to battlefield tactical flexibility will be obviated and force structure and manpower savings realized.

Urbanization itself presents a barrier effect favorable to the NATO defenders. Pact breakthrough doctrine argues against his voluntarily accepting delay for combat in cities or investment of built-up areas which would mitigate momentum. But urban patterns, in addition to their innate obstacle effect, provide the matrix within which minimal defensive forces, and only minor military barrier construction and mining, can be deployed to present a comprehensive barrier effect. The greater precision of conventional firepower effects, while achieving significant target destruction, will reduce the potential collateral damage when this barrier defense is executed.

The improved potential for a successful conventional defense demands more of its subscribers than merely a revised doctrinal and conceptual approach to force utilization. Substantial resource investment is required to introduce the real world aspects of enhanced responsiveness and flexibility, to upgrade the readiness of deployed forces and the deployability of reinforcements, to restructure forces in being to emphasize indirect firepower, to establish logistic support systems for both short- and long-term warfare, and to provide weapons systems of improved antiarmor capability.

*The Demands of Opportunity.* As the alliance leader, the United States must face up, by example and by exhortation, as this Administration is doing, to the costs, both psychic and budgetary, which the opportunities to redress the balance in central Europe present. The United States has taken the lead in efforts toward improved rationalization, standardization and interoperability among NATO forces. However desirable these objectives may be as an ideal, they are met with skepticism by several of the allies, and seen as efforts by the United States to transfer functions and costs at a time when all western states are faced with serious economic problems. Materiel standardization efforts are further hampered by US and other national internal domestic political and economic pressures seeking to preserve unilateral materiel development and production. This presents, for the United States, a dilemma which cannot be resolved exclusively along the path of least cost. The objectives of rationalization and standardization may well induce additive costs to the United States as it



seeks to transfer functions to those allies most suited to perform them and to develop in peacetime, materiel, logistic, and combat sustainment systems which will optimize alliance defense in wartime.

US willingness to break with the tradition of national defensive sectors, evidenced by the stationing of a brigade in NORTHAG and commitment of forces to NORTHAG in wartime, has acted as a catalyst to revise defense concepts. But momentum can be impeded by any drawing back as the result of resource constraints. To capitalize on this momentum, US resource commitments are required to restructure combat forces to enhance their firepower; to reconfigure the logistic system and provide support facilities essential for flexible tactical employment; to replenish depleted POMCUS and war reserve stocks, and increase stockage levels of combat consumables; to accelerate the rate of introduction of improved antiarmor weapons, helicopter attack aircraft, and air defense weapons; to rebase forward deployed forces, over time, to encourage flexible employment alternatives; to integrate the command and control system for the Central Region; to upgrade and sustain the readiness for forward based forces, and of active and reserve component forces which deploy from CONUS and are critical in the short term; and to increase the adequacy of strategic mobility means available to deploying forces.

This is a heavy bill of particulars. Its parallels for the other alliance members are equally onerous. In near term it is unlikely that any other member except the Federal Republic of Germany would find it economically or politically expedient to underwrite comparable force capability improvements. But the example of a willingness to improve the quality of the US contribution should serve to encourage and sustain efforts of the other allies. The growing impetus toward rationalization, standardization, and interoperability has US stimulus. Flexible application of tactical forces will be attainable only when improvements are made in associated command and control and logistic support systems. Weapons system upgrading to improve better antiarmor capability is still several years away, but is in process. Ammunition levels and positioning must be significantly improved regardless of which defensive concepts are employed.

When and if the NATO nations with commitments in the Central Region accomplish conceptual and force structure and modernization objectives, a successful conventional defense will be feasible. Relatively small sized NATO units, flexibly applied to attack Pact penetrations can then disrupt the impetus of the initial attack, diffuse the focus of



the Pact offensive, and prevent successful breakthrough. In view of the short warning time potential, NATO forces must be structured to do this.

### THREAT NOW, OPPORTUNITIES LATER

In the author's opinion, on balance, current and near-term trends favor the Pact. Pact improvements, cited earlier, have been made. The numbers and quality of their weapon systems are improving. Sustainability and logistic improvements relative to their earlier condition, while not comparable to the complex NATO support structure, are adequate to their needs. They are vulnerable in the uncertain reliability of the Soviet allies, and in their narrow doctrinal focus on a breakthrough concept of attack. In the Central Region, on the other hand, NATO improvements, both doctrinal and tangible, remain primarily conceptual; and, while more consistent application of a forward defense strategy is generally accepted within the alliance, it requires investment by all allies in higher orders of readiness.

The United States has taken the lead in articulating the need for NATO military improvements to offset growing Pact advantage. Despite continuing pressures within the alliance as well as within the US domestic political structure to conserve resources and to employ applied resources with maximum effect, the common recognition of upward trends in the threat has served to channel these pressures into constructive courses of action favorable to alliance security. As a result there is little likelihood that the United States under the current Administration would, in the next several years, diminish its active political and military roles in NATO.

*The US Role.* US interests remain dependent on the continuing independence and political and economic vitality of Western Europe. In the absence of any significant downward adjustment of the threat, and there are no indications to support such a reversal of the trends, there are no rational alternatives to the US Government providing, through its own commitments, the matrix which binds the other alliance members together. It is evident that the United States cannot underwrite completely the essential elements of an effective security posture, hence available alternatives relate to those factors we choose to emphasize and the scope of our commitment to them.

US ability to demonstrate more evident support through measures designed to stimulate NATO improvements has been constrained to

date by the degree to which these measures can be offset by resource economies growing out of more efficient use of manpower and hardware. But the cost of necessary improvements in force structure and equipment modernization cannot be indefinitely deferred. Such actions also serve to encourage concurrent allied improvements only if accompanied by political initiatives which convince the allies that US improvements are to reinforce a marginal defense and not a substitute for further constraints in allied participation.

The United States has taken the lead in encouraging strategic concepts which contemplate the more flexible employment of combatant forces throughout the Central Region, demonstrating a maturing perspective of the requirements for successful conventional defense. This approach carries with it, however, concomitant costs in force structure levels and composition and in basing. These initiatives do not presume an ability to do more overall, but the judgmentally better application of the forces which are available through a cohesive alliance effort to satisfy tactical and strategic requirements in order to attain a higher order of conventional defense effectiveness.

Our force posture, and deployed force presence, can be sustained at approximately current levels, reformed and reequipped to accommodate the demands of a conventional war, initiated on short notice and of probable high immediate intensity of violence and early decision. To do this will require internal force structure adjustments, better manpower utilization controls, new weapons, higher levels of sustained force readiness, and greatly improved mobilization and deployment capacities. The alternatives are a continuation of current posture and effort, or progressive withdrawal of deployed forces with assistance and encouragement toward commensurate improvement of allied capabilities. The former option would prejudice US forces already deployed by continuing neglect of those essential improvements required to give them meaningful capability against the Pact threat as we now recognize it. The latter option, which would also require high levels of deployment readiness for deployable US forces based in the United States, depends on allied capabilities not now a likely prospect.

Despite earlier congressional qualifications on permanent US peacetime deployed force presence in Europe, this presence has become the keystone of NATO strategic defense concepts, with symbolic value as a deterrent transcending purely warfighting potential. This consideration acts to inhibit the options open to the United States for unilateral change, but argues for continuing US actions directed toward persuading its allies of the logical evolution of defensive concepts



toward a more effective conventional defense which would secure from attack a more significant portion of the territory of Western Europe.

US forces retained in CONUS at high deployment readiness levels provide a highly flexible range of contingency capabilities, recognizing the potential for employment on the NATO flanks and in expeditionary roles which extend the more restricted NATO regional requirements. There is merit to this flexibility, but the risk is that the consequence of a greater reliance on CONUS based forces would be a general degradation of capability in the Central Region.

The United States continues to take the lead in encouraging programs of NATO rationalization, standardization, and interoperability; but it can succumb to the pressures, both domestic and interallied, which operate to thwart these programs. Cost savings are not always evident, particularly in standardization of materiel, when only the unit cost of systems is considered; but ultimate merit lies in the economies and efficiencies of wartime replacement, repair, and resupply as well as in the strategic and tactical flexibility with which forces can be employed and exchanged.

The "umbrella" of strategic nuclear capability is an essential component of US commitment. There is no present alternative to it. It is the stabilizing factor of interbloc balance which makes more limited defensive efforts feasible. Through SALT we may lessen the credibility of this linkage, but it remains an important premise of NATO security that the most probable challenge to West European freedom of decision and action will be limited to conventional threats.

*The Role of Technology.* In assessing the comparative effectiveness of NATO and Warsaw Pact forces, high value is frequently ascribed to the technological advantages of NATO forces, and to the presumption that these advantages will provide the requisite margin of superiority to insure the deterrent effectiveness of the NATO alliance or the ability to achieve advantage in theater warfare. The applications of technology, or the failure to apply available technology, have, in fact, varying impacts on NATO security.

The growth of "anti-" systems is favorable to the defense oriented strategy of NATO and offers prospects of an improved and successful conventional defense at manpower levels which NATO nations can support. In particular, the increased vulnerability of armor to less expensive weapons with proliferation potential degrades the primary basis for Warsaw Pact strike capability.

Precision guided munitions afford an alternative to the employment



of nuclear weapons in tactical application for lethality effect. While the tactical nuclear alternative may be preserved for its significance as a political signal in wartime or for retaliation, the threshold of its employment would be raised, and battle successes could be achieved with much lower levels of collateral damage in the highly populated regions of Western Europe. But, the tactical nuclear linkage, while less assured, remains an important element of the US commitment to support of other alliance members.

Systems standardization among alliance forces is essential to avoid the growing disparity in relative firepower and battlefield mobility capabilities of the separate national forces. To some degree revised defensive concepts which contemplate the flexible application of forces where most needed for the success of the defense have added impetus to standardization efforts, but the impact of new weapons technology also indicates the need to review again this defensive doctrine to determine whether optimum weapons effects can be achieved within an essentially linear forward defense posture.

High altitude air defense, using nonnuclear munitions, is inadequate, and in need of imaginative application of technology, as is the NATO capability for suppression of the potent Warsaw Pact forward air defense.

NATO naval forces which secure the lines of communication vital to the sustainability of the Central Region are vulnerable to the increasing "anti-" systems provided Soviet naval forces.

Offensive and defensive chemical warfare deficiencies of NATO forces can be compensated without revolutionary developments in technology, but significantly increased impetus is needed to field systems for which technology exists if NATO is to negate the current Pact advantage, and reduce the prospects of chemical warfare as a useful option for either side.

There can be high risks associated with the extent to which forces become dependent on some systems of high technological sophistication. In the intelligence collection and processing area, high technology systems have provided a breakthrough in real-time response for which there is no manual alternative; but other applications, as for example the computer control of command and logistic functions, tend to degrade manual alternatives and introduce uncertainties as to sustained reliability in wartime.

## CONCLUSION

Nearly 30 years of relatively undisturbed tranquility have established

the sui generis character of NATO security. It has long operated on margin, balancing the threat posed by the Warsaw Pact not with equivalent or comparable force but with credible evidence of readiness and willingness to cope at levels of its own choosing. The growing Pact force capabilities in the Central Region have put that evidence in question.

It is in this context that the alliance members, in concert, must take those measures necessary to restore the credibility of NATO resolve. Some progress will emerge from the searching review of the validity of the concepts which underlie our defense strategy, now underway. But an affirmative approach to concomitant force improvements and to the burden of the interim transitional costs which they will impose on the individual nations remains the ultimate test of NATO purpose. The opportunities are there. The signs evident in the agreements reached by the NATO Heads of State in London and the Defence Ministers in Brussels in May 1977 are hopefully indicative that the lessons have been learned, the opportunities recognized, the resources forthcoming. Progress since then is encouraging that NATO will come up with substantive new programs for much needed improvements in NATO defense and security.

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warning time attack against the Central Region. The imbalance in Central Europe is rooted in long term neglect of needed improvements by the NATO nations; neglect perpetuated now by escalating costs of personnel, services, and materiel. The ability to maintain forward deployed stationing of forces is degraded. Maintenance of active forces at acceptable deployability postures has become increasingly difficult, as has the maintenance of reserve forces at readiness commensurate with rapid mobilization. But the most significant, vulnerability of allied defense capabilities derives from the dependence of strategy, force structure, mobilization, reinforcement, and logistic stockage on long warning time assumptions now seriously in question.

Notwithstanding this imbalance, there is a growing conviction that conventional defense is feasible. The NATO allies can ill-afford to trade space for time, but must impose maximum attrition at and beyond the FRG eastern border through massive application of conventional indirect firepower, by realizing the potential defense advantage inherent in "anti" weapons system technologies, and by exploiting barrier effects of burgeoning urbanization, to convince the attacker that his ultimate success is unlikely through failure of his initial effort. Initiatives toward force flexibility, rationalization and interoperability have gained impetus in an attempt to obviate the alarming constraints on the conduct of conventional defense imposed by traditional national sectors. But the improved potential for a successful conventional defense demands more than merely a revised doctrinal and conceptual approach to force utilization. Substantial resource investment is required to enhance responsiveness and flexibility, to upgrade the readiness of deployed forces and the deployability of reinforcements, to restructure forces in being to emphasize indirect firepower, to establish logistic support systems for both short and long term warfare, and to provide weapons systems of improved anti-armor capability.

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